

SHKOL'NIK, V.

Electronic hardness gauge. V pom. radioliub. no. 11:32-42 '61.

(MIRA 15:6)

(Hardness---Measurement) (Electronic apparatus and appliances)  
(Measuring instruments)

SHKOL'NIK, V.M., inzh.

Portable four-channel tensiometer. Izv. vys. ucheb. zav.; gor. zhur.  
no.11:108-116 1959. (MIRA 14:5)

1. Sverdlovskiy radiotekhnicheskiy tekhnikum imeni A. S. Popova.  
Rekomendovana kafedroy gornoy elektrotekhniki Sverdlovskogo  
gornogo instituta.

(Tensiometers)

18000

S/118/61/000/012/002/003  
D221/D305

AUTHOR: Shkol'nik, V.M., Engineer

TITLE: An automatic instrument for quality control of  
heat treatment of steel components

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva,  
no. 12, 1961, 36-40

TEXT: The author describes an automatic unit which he developed. It uses the non-destructive method of structure control and also the related hardness of steel components. The author directed the work on the electronic part, whereas the mechanical section was made by the 6th Gosudarstvennyy podshipnikovyy zavod ( 6th State Ball-bearing Factory), where it was tested. Its operating principle is based on the relationship between the magnetic and electric properties of a substance and its chemical composition as well as crystallographic structure.

Card 1/4

30890  
S/118/61/000/012/002/003  
D221/D305

An automatic instrument ...

The hardness of component depends on the latter. The automatic control consists of measuring the magnetic permeability, to which hardness is related, by comparing to a standard. This is achieved with two inductors, whose cores are formed by the standard and the specimen. Their coils are connected to a bridge. The unbalance voltage is proportional to the difference in their permeability ( and, thus, hardness). The phase of output voltage is related to the hardness of the specimen. The bridge feeds a three-cascade amplifier, the last stage being phase sensitive. The anodes are connected to signal lamps and solenoids of the sorter. A detailed description is given of the operation of this automatic sorter. The supply is ensured by two rectifiers. One is based on germanium diodes and voltage stabilizing valves. The other circuit incorporates germanium diodes and provides the low voltage for solenoids and counters. The input of the bridge is balanced by a valve voltmeter. When the active and reactive components of the input

Card 2/4

30890  
S/118/61/000/012/002/003  
D221/D305

An automatic instrument ...

are balanced, then the output current in the milliammeter is zero. This produces two opposite currents in the output which cancel each other. In the case of differences in hardness, there is a voltage generated in the secondary of the transformer, and a differential current will pass through the instrument. The change in the sign of hardness of the specimen, as compared to the standard, causes a phase shift in the output. This is compared in a phase displacement of  $45^\circ$  obtained by the condenser divider. The automatic unit comprises a hopper which feeds rollers at certain intervals along a tube, and into the transducer. The sorting device is mounted underneath the latter. It separates components into three categories: good, too soft and too hard. The sleeve of the transducer is provided with slots, where lags for component rejection are placed. Application of interchangeable blocs of transducers and the feed system permit a rapid resetting for other types of workpieces. The present

Card 3/4

An automatic instrument ...

30890  
S/118/61/000/012/002/003  
D221/D305

output of 2000/hrs can be increased to 5-6000, by changing the time constant of the grid circuit of the electronic time relay. In addition the feeding and disposition of the lags (gates) in the sorter should also be adjusted. Tests proved that the unit operates reliably. The indications are not related to the diameter or height of components within the permitted limits. Some errors are introduced by the scatter of chamfer sizes. There are 3 figures.

x

Card 4/4

SHKOL'NIK, V.M., inzh.

Automatic unit for controlling the quality of the heat treatment of  
steel parts. Mekh. i avtom.proizv. 15 no.12:36-40 D '61.  
(MIRA 14:12)

(Steel--Heat treatment) (Automatic control)

SKOLNIK, V.M. [Shkol'nik, V.M.]

An automatic machine for controlling the quality of the thermal treatment of steel castings. Analele metalurgie 16 no.3:159-167 JI-S '62.



SHKOL'NIK, V.M., inzh.

Use of four-terminal networks for balancing the input bridges of  
tensiometer amplifiers. Izv. vys. ucheb. zav.; gor. zhur. 6  
no. 4:144-157 '63. (MIRA 16:7)

1. Sverdlovskiy radiotekhnicheskiy tekhnikum imeni Popova.  
Rekomendovana kafedroy avtomatizatsii proizvodstvennykh protsessov.  
(Amplifiers (Electronics)) (Tensiometers)



SHCHUKIN, Ya. OL.; TOMASHKO, A.F.; PELYUGHE, G.T.

pyridine bases of brown coal tar in Transcarpathia. Ukr. khim.  
zhur. 30 no.7:731-733 '64 (MIRA 18:1)

1. Chernovitskiy gosudarstvennyy universitet.

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 148

TOPIC TAGS: ultrasonic flaw detection, <sup>OR</sup> ultrasonic quality control, ~~water-containing~~  
~~contact liquid~~ ~~contact liquid composition~~, ~~rough machined surface inspection~~

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001549710006-8

ABSTRACT: This Author Certificate introduces a liquid medium for ultrasonic detection. To assure effective quality control, especially in inspection of rough surfaces, the liquid contains 0.8—2.0% polyacrylamide, 0.4—1.0% sodium nitrate and 97—98.8% water. [WW]

SUB CODE: 11,13/ SUBM DATE: 22Nov65/ ATD PRESS: 5110

Card 1/1

UDC: 620.179.16

L 52097-65 EPF( )/EPR/EWP(j)/EWT(m)/T/EWP(v) Pc-4/Pr-4/Ps-4 WW/RM

ACCESSION NR: AP5015266

UR/0286/65/000/009/0048/0048

AUTHORS: Dombrovskiy, A. V.; Shkol'nik, Ya. Sh.; Shkol'nik, R. S.

TITLE: Cementing composition based on aqueous solution of polyacrylamide,  
Class 22, No. 170601

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 48

TOPIC TAGS: cement, plywood, polyacrylamide, hydrochloric acid, ammonium compound

ABSTRACT: This Author Certificate presents a cementing composition based on an aqueous solution of polyacrylamide and used in producing plywood sheets. To increase the strength of cemented plywood joints, a mixture of urotropine and a mineral acid (for instance, hydrochloric acid) or a solution of free aldehyde and an acid salt (ammonium chloride) is added to the aqueous solution of polyacrylamide.

ASSOCIATION: none

SUBMITTED: 14Oct63

ENCL: 00

SUB CODE: GG,MT

NO REF SOV: 000

OTHER: 000

Card 1/17

SHKOL'NIK, YE. I.

DANILOVA, M.K.; IVANOVA, N.M.; KALININ, T.V.; PERELYGINA, L.I.; SALMANOVA,  
Ye.S.; SHKOL'NIK, Ye.I.; SHLEYFMAN, Kh.I.; STOLYAROVA, A.I., red.;  
SERADZSKAYA, P.G., tekhn.red.

[Economy of Voronezh Province; a statistical manual] Narodnoe  
khoziaistvo Voronezhskoi oblasti; statisticheskii sbornik, [Voronezh]  
Voronezhskoe knizhnoe izd-vo, 1957. 139 p. (MIRA 11:3)

1. Voronezh (Province). Statisticheskoye upravleniye. 2. Statisti-  
cheskoye upravleniye Voronezhskoy oblasti (for all, except Stolyarova,  
Seradzhskaya). 3. Nachal'nik Statisticheskogo upravleniya (for  
Stolyarova)

(Voronezh Province--Statistics)

IVANOVA, N.M.; KOZHINA, A.D.; PEREL'YGINA, L.I.; TARASOVA, V.A.;  
FURSOVA, Ye.I.; CHEREZOVA, R.S.; SHKOL'NIK, Ye.I.; SHLEYFMAN,  
Kh.I.

[Economy of Voronezh Province in 1960; collection of statistics]  
Narodnoe khoziaistvo Voronezhskoi oblasti v 1960 godu; statisti-  
cheskii sbornik. Voronezh, Voronezhskoe otd-nie Gosstatizdata,  
1961. 139 p. (MIRA 15:6)

1. Voronezh. Oblastnoye statisticheskoye upravleniye.  
(Voronezh Province--Economic conditions)

SHKOL'NIK, Ye.S.

Improving drawing instruction in secondary schools. Politekh.  
obuch. no.1:56-57 Ja '59. (MIRA 12:2)

1. Leningradskoye khudozhestvenno-graficheskoye pedagogicheskoye  
uchilishche.  
(Mechanical drawing--Instruction)

SHKOL'NIK-YAROS, Ye. G.

Shkol'nik-Yaros, Ye. G. "Motor disturbances in injuries to the pre-stir zone following military brain traumas", In the collection: Nevrologiya voyen. vrachen, Vol. 1, Moscow, 1949, p. 189-202.

ED: 6-411, 17 July 1963, (Lobovis Zhurnal 'nykh Statey, no. 20, 1949)



ZVORYKIN, V.P.; SHKOL'NIK-YARROS, Ye.G.

Numerical data on the relationship of the peripheral part of the visual analyzer to cerebral ends of the analyzers in a number of vertebrates. Arkh. anat., Moskva 30 no.5:43-47 Sept-Oct 1953. (CIMI 25:4)

1. Of the Institute of the Brain (Director -- Prof. S. A. Sarkisov, Active Member AMS USSR), Ministry of Public Health USSR.

SHKOL'NIK-YARROS, Ye.G.

Morphology of the visual analyzer. Zhur. vys. nerv. deiat. 4 no.2:  
289-304 Mr-Apr '54. (MLRA 7:10)

1. Laboratoriya neyrogistologii Instituta mozga Ministerstva  
Zdravookhraneniya SSSR.  
(BRAIN, anatomy and histology,  
visual center)

SHKOL'NIK-YARROS, Ye.G.

Structure of the cerebral end of the visual analyser in  
Cercopithecidae. Probl. fiziol.opt. 11:162-175 '55. (MLRA 9:6)

1. Laboratoriya neyrogistologii Instituta mozga Ministerstva  
zdravookhraneniya SSSR.

(CEREBRAL CORTEX, anatomy and histology,  
visual area in monkeys (Rus))

EXCERPTA MEDICA SE 8 Vol 12/2 Neurology Feb 59

745. SOME VARIATIONS OF THE AXO-DENDRITIC CONTACTS IN THE  
CEREBRAL CORTEX OF ANIMALS (Russian text) - Shkolnik-Yarros  
E. G. Brain Inst., USSR Acad. of Med. Scis, Moscow - PROBL. MORFOL.  
NERV. SIST. 1956 (51-58) Illus. 7

The morphologic characteristics of the axo-dendritic connections were studied in the visual area of the cortex in rabbits, dogs and monkeys; the chrome-silver impregnation method was used. The finest structures of axonal and dendritic ramifications representing the synaptic formations of the nerve cells are described, and various types of axonal and dendritic endings. Variations in the mode of contact (enveloping, duplicating, etc.) between axons and dendrites with neighbouring or other cells of the cortex are described. The descriptions are illustrated with microphotographs. The advantages of the chrome-silver impregnation method are stressed, which, together with neurofibrillar methods, may provide suitable material for study of the multiplicity and variability of cortical contacts.

Zhukova - Moscow (S)

SHKOL'NIK-YANNOS, Ye.G.

Descending fibers in the visual area of the cortex [with summary in English]. Zhur.vys.nerv.deiat. 8 no.1:123-136 Ja-F '53. (MIRA 11:3)

1. Laboratoriya neyrogistologii Instituta mozga AMN SSSR, Moskva.  
(CEREBRAL CORTEX, physiology,  
efferent visual fibers (Rus)

SHKOL'NIK-YARROS, Ya.G.

Neuron structure of the visual analyzor. Probl.fiziol.opt. 12:429-438  
'58 (MIRA 11:6)

1. Laboratoriya neyrogistologii Instituta mozga AMN SSSR.  
(EYE--INNERVATION)

SHKOL'NIK-YARROS, Ye.G.

"Quantitative study of the visual cortex" [in German] by Herbert  
Haug. Reviewed by E.G. Shkol'nik-Iarros. Arkh.anat.gist. i embr.  
36 no.1:110-111 Ja '59. (MIRA 12:3)  
(CEREBRAL CORTEX)  
(VISION)  
(HAUG, HERBERT)

SHKOL'NIK-YAROS, Ye.G. (Moskva, G-117, 2-y Truzhennikov per., 4, kv. 61)

Neurons of the visual cortex in man. Arkh.anat.gist.i embr. 38 no.2:  
24-38 F '60. (MIRA 14:6)

1. Laboratoriy neyrogistologii (zav. - prof. G.I.Polyakov) Instituta  
mozga AMN SSSR.  
(CEREBRAL CORTEX)



SHKOL'NIK YAKOV, Ye.G.

Some forms of interneuronal connections in the system of the visual  
analyzers. Zhur. vys. nerv. deiat. 11 no.4:680-689 J1-Ag '61.  
(MIRA 15:2)

1. Laboratory of Neurohistology, Institute of Brain, U.S.S.R.  
Academy of Medical Sciences, Moscow.  
(VISION)

SHKOL'NIK YARROS, Ye.G. (Moskva, G-117, 2-y Truzhenikov per., 4, kv.61)

Structure of the visual analysor in relation to the problem of color vision. Arkh. anat. gist. i embr. 42 no.2:12-30 F '62. (MIRA 15:2)

1. Laboratoriya neyrogistologii (zav. - prof. G.I.Polyakov). Instituta mozga AN SSSR.  
(VISION) (COLOR SENSE) :

SKREBITSKIY, V.G.; SHKOL'NIK ~~YABROS~~, Ye.G.

Representation of the visual analyzer in the cerebral cortex. Zhur.  
vys. nerv. deiat. 14 no.2:277-286 Mr-Apr '64. (MIRA 17:6)

1. Laboratories of Electrophysiology and Neurohistology, Institute  
of Brain, U.S.S.R. Academy of Medical Sciences.

BEIN, T.V.; PORTUGALOV, V.V.; SHVOL'NIK-YAROS, Ye.G.

Structural and histochemical characteristics of the  
corpus geniculatum laterale in Primates. Zhur. vys. nerv.  
deiat. 14 no. 4: 707-713 J1-Ag '64. (MIRA 17:12)

1. Laboratory of Histochemistry and Neurohistology,  
Brain Institute, U.S.S.R. Academy of Medical Sciences,  
Moscow.

SHKOL'NIK-YARROS, Ye.G.

Some apparatus of interneuronal connections in the cerebral  
cortex. Zhur. vys. nerv. deiat. 15 no.6:1063-1071 N-D '65.

(MIRA 19:1)

1. Laboratoriya neyrogistologii Instituta mozga AMN SSSR.  
Submitted June 21, 1965.

ACC NR: AM6015332

Monograph

UR/

Shkol'nik-YAross, YEkaterina Grigor'yevna

Neurons and interneuronal connections. Visual analyzer (Neyrony i' mezhneyronnyye svyazi. Zritel'nyy analizator) [Leningrad] Izd-vo "Meditsina," 1965. 226 p. illus., biblio. 2200 copies printed.

TOPIC TAGS: neuron, cerebral cortex, vision

PURPOSE AND COVERAGE: The book is devoted to the structure of neurons and interneuronal connections of the visual cortex and the lateral geniculate body in different animals and man. New data are presented concerning the localization of the visual system in the brain cortex. A hypothesis is suggested explaining the morphological basis of color vision in visual centers. The book is intended for physiologists, morphologists, neuropathologists and neurocyberneticists.

TABLE OF CONTENTS:

Part I. Introduction -- 3

Ch. I. Neurons of the visual analyzer -- 5  
The cortex and the lateral geniculate body --

Card 1/3

UDC: 611.814.4+611.814.7]-018-019

ACC NR: AM6015332

The structure of neurons of the visual cortex and the lateral geniculate body in certain mammals (hedgehog, rabbit, dog, monkey, man) -- 15

The size of neurons and their distribution density --

Peculiarities of layers of the visual cortex -- 19

Similarities and differences of neurons in monkeys and man -- 34

Distinctive structural features of neurons of the 17th, 18th, and 19th occipital areas in man -- 51

Ch. II. Interconnections of neurons and details of their structure -- 99

Endings and branches of axons --

Endings and branches of dendrites -- 103

Differences in connections between cortical neurons and subcortical neurons of the visual analyzer -- 113

Concerning the presence of spines on dendrites, their genesis and function -- 143

The structure of interneuronal connections in the cortex -- 148

Ch. III. Differences in structure and connections of the cortical and subcortical levels of the visual analyzer -- 153

Connections of the pyramidal cells and their significance --

Connections of astrocytes (long-axon Cajal cells) -- 156

Card 2/3

ACC NR: AM6015332

Connections of the short-axon astrocytes and their significance -- 157  
Neurons of the lateral geniculate body -- 161  
Basic differences of the neurons of the visual cortex and the lateral geniculate body -- 164

Ch. IV. Structure of the visual analyzer and paths of stimulus propagation -- 170

Cerebral nucleus of the analyzer and dispersed elements --

Efferent connections of the visual cortex -- 179

Centrifugal connections of the retina -- 192

Diagram of the structure of the visual system -- 195

Ch. V. The specificity of structure of the visual analyzer -- 199

Neuron structure of the visual analyzer compared to other neurons --

Specificity of structure related to the problem of color vision -- 206

Some new data concerning the structure and function of the lateral geniculate body of primates in relation to the problem of color vision -- 213

Bibliography -- 218

SUB CODE: 06/ SUBM DATE: 03Nov65/ ORIG REF: 044/ OTH REF: 130  
Card 3/3



REYSLER, Yuriy Veniaminovich; NIKOLAYEV, Yuriy Alekseyevich;  
SHKOL'NIKOV, A., red.; ROZIN, M., red.; USTINOVA, S.,  
tekhn. red.

[Over-all mechanization of pea harvesting] Kompleksnaia me-  
khanizatsiia uborki gorokha. Moskva, Mosk. rabochii, 1962.  
93 p. (MIRA 15:10)

(Peas--Harvesting)

VOYTOV, Pavel Ivanovich, kand. sel'skokhoz. nauk; ROZIN, M., red.;  
SHKOL'NIKOV, A., red.; KUZNETSOVA, A., tekhn. red.

[Machines and attachments for the placement of liquid fertilizers]  
Mashiny i prispobleniia dlia vneseniia zhidkikh udobrenii.  
Moskva, Mosk. rabochii, 1963. 85 p. (MIRA 16:6)  
(Fertilizer spreaders)

SH'OL'NIKOV, A.A.

Railroad car used for giving instruction in electric traction.  
Elek. i tepl. tiaga 2 no.3:3 of cover Mr '58. (MIRA 11:4)  
(Electric railroads--Study and teaching)

SHKOL'NIKOV, A.A.

Useful equipment for repairing locomotives. Elek.i topl.tiaga  
3 no.5:18-19 My '59. (MIRA 12:9)

1. Starshiy inzhener TSentral'nogo doma tekhniki zheleznodorozh-  
nogo transporta.

(Locomotives--Maintenance and repair)

SHKOL'NIKOV, A.A., inzh.

Textolite washers for brush holders. Elek.i tepl.tiaga 4 no.2:9  
F '60. (MIRA 13:6)  
(Electric railway motors)

SHKOL'NIKOV, A.A., inzh.

Pneumatic shears for cutting contact plates of the pantograph.  
Elek.i tepl.tiaga 6 no.4:8 Ap '62. (MIRA 15:5)  
(Electric railroads--Equipment and supplies)

SHUGAROV, A.I., prof.; SHKOL'NIKOV, A.B., red.; MAKHOVA, N.M., tekhn.  
red.; PEVZNER, V.I., tekhn. red.

[Physics] Fizika. Moskva, Izd-vo sel'khoz. lit-ry, zhurnalov  
i plakatov, 1961. 419 p. (MIRA 15:3)  
(Physics)

SPERANSOV, Nikolay Nikolayevich; SHKOL'NIKOV, A.B., red.; BALLOD,  
A.I., tekhn. red.

[Use of petroleum products on state and collective farms]  
Neftekhoziaistvo sovkhozov i kolkhozov. Moskva, Sel'khoziz-  
dat, 1962. 302 p. (MIRA 15:9)  
(Petroleum products) (Fuel) (Lubrication and lubricants)



KOROLENKO, Ivan Ivanovich; VESNA, Nikolay Mitrofanovich; SHKOL'NIKOV,  
A.B., red.; PEVZNER, V.I., tekhn.red.

[Aleksandr Gitalov's school] Shkola Aleksandra Gitalova. Moskva,  
Gos.izd-vo sel'khoz.lit-ry, 1959. 35 p. (MIRA 13:6)  
(Gitalov, Aleksandr Vasil'yevich)  
(Kirovograd Province--Socialist competition)

SHATS, Yefim L'vovich; ENTIN, Isaak Arkad'yevich; SHKOL'NIKOV, A.B.,  
red.; PEVZNER, V.I., tekhn.red.

[Power equipment of repair and supply stations and state  
farms; arrangement, operation, and repair] Energosilovoe oboru-  
dovanie BTS i sovkhovov; ustroistvo, ekspluatatsiia i remont.  
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 351 p. (MIRA 12:8)  
(Electric power plants--Equipment and supplies)  
(Repair and supply stations) (State farms)

SHKOL'NIKOV, A.B.

GEL'MAN, Boris Mikhaylovich; KRAYEVSKAYA, Ye.K.; MOSKVIN, M.V.; ALISANOV,  
B.I.; AL'GIN, B.P.; VODOLAZHCHEKHO, Yu.T.; LEVITANUS, A.D.;  
SHKOL'NIKOV, A.B., ed.; BALLOD, A.I., tekhn.red.

[Wheeled diesel tractors] Dizel'nye kolesnye traktory. Moskva,  
Gos.izd-vo sel'khoz.lit-ry, 1959. 423 p. (MIRA 13:2)  
(Tractors)

ETERLEY, Nikolay Semenovich; POTEKHIN, Aleksey Andreyevich; SHKOL'NIKOV,  
A.B., red.; DEYEVA, V.M., tekhn.red.

[Electric machinery] Elektricheskie mashiny. Moskva, Gos.izd-vo  
sel'khoz.lit-ry, 1960. 299 p. (MIRA 13:6)  
(Electric machinery--Study and teaching)

MIKHAYLOVSKIY, Yevgeniy Vasil'yevich; TSIMBALIN, Viktor Borisovich;  
SHKOL'NIKOV, A.B., red.; PEVZNER, V.I., tekhn.red.

[Theory of tractors and automobiles] Teoriia traktora i  
avtomobilia. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 335 p.  
(MIRA 13:11)

(Tractors)      (Automobiles)

DOLZHENKOV, A.T., kand.tekhn.nauk, red.; SHKOL'NIKOV, A.B., red.;  
GOR'KOVA, Z.D., tekhn.red.

[Training in repairing tractors, motor vehicles, and  
agricultural machinery] Praktikum po remontu traktorov,  
avtomobilei i sel'skokhoziaistvennykh mashin. Moskva, Gos.  
izd-vo sel'khoz.lit-ry, 1960. 431 p.

(MIRA 14:2)

(Tractors--Maintenance and repair)  
(Motor vehicles--Maintenance and repair)  
(Agricultural machinery--Maintenance and repair)

YATCHENKO, Semen Vasil'yevich; SHKOL'NIKOV, A.B., red.; ZUBRILINA, Z.P.,  
tekhn.red.

[Machining on lathes] Tokarnoe delo. Izd.9., perer., dop.  
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 493 p. (MIRA 13:6)  
(Turning)

SAZONOV, N.A.; SHKOL'NIKOV, A.B., red.; PEVZNER, V.I., tekhn.red.

[Manual for rural electricians] Rukovodstvo dlia sel'skogo  
elektromontera. Izd.5., perer. i dop. Moskva, Gos.izd-vo  
sel'khoz.lit-ry, 1960. 532 p. (MIRA 13:12)  
(Electricians--Handbooks, manuals, etc.)  
(Electricity in agriculture)



GUREVICH, A.M.; SOROKIN, Ye.M.; SHKOL'NIKOV, A.B., red.; GOR'KOVA,  
Z.D., tekhn. red.; TRUKHINA, O.N., tekhn. red.

[Tractors and motor vehicles] Traktory i avtomobili. Mo-  
skva, Izd-vo sel'khoz. lit-ry, zhurnalov i plakatov, 1961.  
567 p. (MIRA 15:3)

(Tractors)

(Motor vehicles)

GUDKOV, Aleksandr Nikolayevich, prof., doktor tekhn. nauk;  
SHKOL'NIKOV, A.B., red.; BELOVA, N.N., tekhn. red.

[Some problems of mechanization in agriculture] Nekotorye  
problemy mekhanizatsii sel'skokhoziaistvennogo proizvodstva.  
Moskva, Sel'khozizdat, 1962. 45 p. (MIRA 16:2)  
(Agricultural machinery)

OKOROKOV, N.I.; BARANOV, V.V.; SEMENOV, V.M.; SHKOL'NIKOV, A.B.,  
red.; GUREVICH, M.M., tekhn. red.

[Farm mechanization and electrification] Mekhanizatsiia i  
elektrifikatsiia sel'skogo khoziaistva. Moskva, Sel'khoz-  
izdat, 1962. 415 p. (MIRA 15:7)  
(Farm mechanization) (Electricity in agriculture)

BLAGOVESHCHENSKIY, Georgiy Viktorovich; SHKOL'NIKOV, A.B., red.;  
SOKOLOVA, N.N., tekhn. red.

[Principles of safety and fire prevention technique in  
agriculture] Osnovy tekhniki bezopasnosti i protivopo-  
zharnoi tekhniki v sel'skom khoziaistve. Moskva, Sel'-  
khozizdat, 1963. 279 p. (MIRA 16:10)  
(Agriculture—Safety measures)  
(Fire prevention)

GUREVICH, A.M.; SOROKIN, Ye.M.; SHKOL'NIKOV, A.B., red.

[Tractors and motor vehicles] Traktory i avtomobili.  
Izd.3., ispr. i dop. Moskva, Izd-vo "Kolos," 1964. 543 p.  
(MIRA 17:5)

LEBEDEV, B.M., kand. tekhn. nauk; PRONIN, V.M., inzh., retsenzent;  
SHKOL'NIKOV, A.B., inzh., red.

[Sprinklers; theory and construction] Dozhdeval'nye mashiny;  
teoriia i konstruktsii. Moskva, Mashinostroenie, 1965. 254 p.  
(MIRA 18:10)

SHKOL'NIKOV, ALEKSANDR DMITRIYEVICH, assistant

Concerning the limits of the application of S.A.C haplygin's theorem to some nonlinear equation of the motion of electromechanical systems. Izv. vys. ucheb. zav.; elektromekh. 4 no.11:3-8 '61.  
(MIRA 14:12)

1. Kafedra avtomatizatsii proizvodstvennykh protsessov Leningradskogo gornogo instituta.

(Differential equations)

(Electronic calculating machines)

16 2900  
16 6-00  
S/044/62/000/006/077/127  
B168/B112

AUTHOR: Shkol'nikov, A. D.

TITLE: Use of S. A. Chaplygin's theorem for estimating the error  
in values given by analog computers

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 26, abstract  
6V134 (Zap. Leningr. gorn. in-ta, v. 45, no. 1, 1961, 60-64)

TEXT: A simple scheme is proposed for the construction, by means of small  
analog computers, of functions satisfying the differential inequalities  
corresponding to ordinary differential equations. On the basis of lemma 3  
and theorem 5 published in RZhMat, 1959, 594, a theorem is derived which  
enables to determine from the form of a comparison function (satisfying the  
differential inequality) the limit of applicability of Chaplygin's theorem  
concerning the differential inequality and to obtain an estimate of the  
disposition of the solution of the differential equation by means of analog  
computers. [Abstracter's note: Complete translation.] ✓B

Card 1/1



SHKOL'NIKOV, A.D.

Concerning the application of Chaplygin's theorem. Radiotekh.  
i elektron. 7 no.3:576 Mr '62. (MIRA 15:2)  
(Electric networks)  
(Differential equations)

TEREKHOV, G.A.; SHKOL'NIKOV, A.D.

Electric modeling of periods of the working cycle of a percussion  
air drill. Zap. LGI 47 no.1:30-36 '62. (MIRA 16:5)  
(Boring machinery—Electromechanical analogies)

SHKOL'NIKOV, A.D.

Computer technique of determining the usefulness of S.A.  
Chaplygin's theorem. Zap. LGI 47 no.1:96-99 '62. (MIRA 16:5)  
(Inequalities (Mathematics)) (Electronic computers)

GUDKOV, A.V., inzh.; SHKOL'NIKOV, A.D., inzh.

Study of the use of calculating machines in regulating movement  
in open-pit haulage. Gor.zhur. no.2:46-48 P '63. (MIRA 16:2)

1. Leningradskiy institut inzhenerov zheleznodorozhnogo transporta  
(for Gudkov). 2. Leningradskiy gornyy institut (for Shkol'nikov).  
(Mine railroads) (Calculating machines) (Automatic control)

TEREKHOV, G.A., inzh.; SHKOL'NIKOV, A.D., assistant

Electronic simulation of the working cycle of an air drill. Izv.  
vys. ucheb. zav.; gor. zhur. 6 no.4:68-78 '63. (MIRA 16:7)

1. Leningradskiy ordena Lenina i ordena Trudovogo krasnogo  
Znameni gornyy institut imeni G.V. Plekhanova. Rekomendovana  
kafedroy gornoelektromekhanicheskogo tsikla.  
(Boring machinery--Models)

SHKOL'NIKOV, A.D., kand. tekhn. nauk

Industrial testing of the model of a system for the operative  
control of strip mine operations. Gor. zhur. no.11:58-61 N '64.  
(MIRA 18:2)

1. Leningradskiy gornyy institut.

SHKOL'NIKOV, A.D., kand. tekhn. nauk

The task of drawing up an operative plan. Izv. vys. ucheb. zav.;  
gor. zhur. 8 no.2:7-12 '65. (MIRA 18:5)

1. Leningradskiy ordena Lenina i ordena Trudovogo Krasnogo Znameni  
gornyy institut imeni G.V.Plekhanova.

SILANT'YEV, A.

USSR/Physics - Gamma Radiation

11 Sep 52

"Gamma Radiation of Sb<sup>124</sup>," K. Gromov, B. Dzhelepov, N. Zhukovskiy,  
A. Silant'yev, Yu. Khol'nov

"Dok Ak Nauk SSSR" Vol 86, No 2, pp 255-258

By means of the gamma spectrometer that employs the Compton electron, the authors investigate gamma radiation of subject antimony isotope, under conditions similar to those of the investigation of gamma spectra of Co<sup>60</sup> and Ag<sup>110</sup> in 1951 by the authors. The source of gamma rays was activated metallic antimony in the amt of 0.7 gram. Discuss exptl curve of current strength in an electromagnet versus number of coincidences per unit of time. Submitted by Acad P. I. Lukirskiy 2 Jul 52

235T98



SILANT'YEV, A.

235T88

235T88

USSR/Physics - Gamma-Spectrum of Br<sup>82</sup> 21 Jul 52

"The Gamma-Ray Spectrum of Br<sup>82</sup>," B. Dzhelepov, A. Silant'yev, Radium Inst, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol 85, No 3, pp 533-535

Investigates the gamma-ray spectrum of Br<sup>82</sup> with the aid of the Radium Institute's gamma spectrometer ("ritron"), which was described by B. S. Dzhelepov and M. Orlov ("Dok Ak Nauk SSSR" Vol 62, 615, 1948). Gives a table showing the energy and intensity of the gamma rays of Br<sup>82</sup> in comparison with foreign results. Acknowledges assistance of

235T88

N. N. Zhukovskiy, Yu. V. Khol'nov, and K. Gromov.  
Submitted by Acad P. I. Lukirskiy 14 May 52.

SHKOL'NIKOV, A. S. and KANTOR, S. A.

"Portable and Economical Instruments for the Radioactive Survey Methods,"  
Utilization of Radioactive Isotopes & Emanations in the Petroleum Industry  
(Symposium), Min. Petroleum Industry USSR, 1957.

Results of the Joint Session of the Technical Council of Min of the Petroleum  
Industry USSR and Soviet Sci and Technical Association, Moscow 14-19 Mar 1956.

11(0)

SOV/93-58-11-4/15

AUTHOR: Yerozolimskiy, B.G., Voytsik, L.R., Popov, N.V., and Shkol'nikov, A.S.

TITLE: New Oilfield Exploration Methods Employing Pulse Generating Neutron Sources (Novyye metody issledovaniya burovnykh skvazhin, osnovannyye na ispol'zovaniy impul'snykh neytronnykh istochnikov)

PERIODICAL: Neftyanoye khozyaystvo, 1958, Nr 11, pp 21-28 (USSR)

ABSTRACT: The article notes the development of neutron generators for radioactivity well logging in the Soviet Union and America [Ref 1-4] and analyzes the possible employment of such units in pulse operation as well as the development of new exploration methods based on pulse generating neutron sources which will enable one to study the unsteady processes of neutron and reservoir rock interaction. Understanding of the processes taking place in the medium around the source after its emission of a short pulse of neutrons [Ref 5,6] will make it possible to find the ways of utilizing the pulse method for solving the geophysical problems of oilfields. One of these possible methods is the determination of the formation's porosity and its fluid mineralization by measuring the nonstationary field of thermal neutrons. This requires finding the dependence of the thermal neutron stream on the time which is presented by Fig. 2 as the curve of  $n(t)$ , where  $n$  is the number of thermal neutrons registered by the tracer and  $t$  - the time.

Card 1/2

New Oilfield Exploration Methods (Cont.)

SOV/93-58-11-4/15

Function  $n(t)$  is computed from the theory of diffusion [Ref 7] and expressed by the formula 
$$n(t) = \frac{C}{(Dt)^{3/2}} e^{-\frac{r^2}{4Dt} - \frac{t}{\tau}}$$
, where  $D$  is the

coefficient of neutron diffusion in a medium depending primarily on the reservoir rock's hydrogen content and  $\tau$  - the life span of the thermal neutrons depending somewhat on the hydrogen content and to a greater extent on the water mineralization due to its chlorine content. Among the other possible new methods that can be developed with impulse generating neutron sources are those which may be based on measuring the slowing down time of the neutrons, as well as on determining which reservoir rock contain carbon by means of inelastic scattering gamma ray spectra [Ref 8-10]. The unit employed in oilfield exploration methods based on pulse generating sources is presented by Fig. 1. There are 2 figures and 10 references, 4 of which are Soviet and 6 English.

Card 2/2

SHKOLNIKOV, A.S.

PHASE I BOOK EXPLOITATION 50V/600

Yednaya geofizika; sbornik staty po teorii i praktike radioaktivnykh izucheni  
i ispol'zovaniyu geofiziki (Nuclear Geophysics: Collection of Articles on  
the Use of Radioactive Radiation and Isotopes in Petroleum Geology) Moscow,  
Gostekhizdat, 1959. 370 p. Errata slip inserted. 4,000 copies printed.

Ed.: P.A. Alabazov, Professor, Doctor of Geological and Mineralogical Sciences;  
Rec. Ed.: A.P. Molodtsov, Tech. Sci. A.S. Shkolnik.

PURPOSE: This book is intended for petroleum geologists, geophysicists and sci-  
entists engaged in geological research who are interested in radioelectric tech-  
niques of petroleum prospecting.

CONTENTS: The collection contains 26 articles compiled by staff members and  
aspirants of the Laboratory for Nuclear Geology and Geophysics of the Petroleum  
Institute (now the Institute for Geology and Mineral Fuel Processing) of the  
Academy of Sciences USSR, the Laboratory for Radioactive Logging of the All-  
Union Scientific Research Institute of Geophysics, and the heads of councils  
for planning research projects for petroleum enterprises. The articles treat  
new material on radioelectric surveying in petroleum geology, describe radio-  
metric instruments (counters, etc.) for registering neutrons and gamma rays,  
give the results of research with models of rock strata, introduce funda-  
mentals of a new method for effectively utilizing radioactivity in the anal-  
ysis of rock samples from petroleum-survey bore holes, etc. Problems of  
method in the study and interpretation of radioelectric measurements in bore  
holes are treated as well as the results of studies in the nonabsorption  
of tritium in tracing the movement of fluids in the subsurface.  
Finally, a new method of surveying based on measuring the radioactivity of  
the surface of a prospective petroleum deposit is described. No personal-  
ities are mentioned. References accompany each article.

Grumblov, A.P., V.V. Matveyev, G.S. Semenov, and A.D. Shkolnik. Radio-  
meter-Analyser "Avtogaz" and Its Use in Radiometric Oil and Gas  
Prospecting 279

Matveyev, V.V., and A.D. Shkolnik. Scintillation Liquid Radiometer: An-  
alyzer "Avtogaz" for Aerial Prospecting 290

Grumblov, A.P. Experiment in the Separate Registration of the Thorium  
and Radium Components of Gamma Radiation Upon Prospecting With Auto-  
mobile-Mounted Radiometers 300

Filippov, Ye.M. Some Problems in the Methodology and Theory of the  
Gamma-Gamma Method 306

Zolotov, A.V. Effective Cross Sections of Chlorine for Slow Neutrons 332

Yerosolimskiy, B.O., and A.S. Shkolnik. A Method of Separating Oil-  
and Water-Bearing Strata, Based on Use of a Pulsating Neutron Source 337

Bespalov, D.F., and A.I. Khramov. A High Voltage Source of 100 Kv for  
Neutron Generators Used in Geod Wells 346

Yerosolimskiy, B.O., L.N. Bondarenko, L.N. Voyatik, Ye.S. Shkolnikovich,  
and L.I. Yulish. A Small-Sized Seamless Neutron Tube 351

Voyatik, L.N., and B.G. Yerosolimskiy. A Laboratory Neutron Generator 356

AVAILABLE: Library of Congress

SHKOL'NIKOV, M.S.

S/169/61/000/011/027/065  
D226/D304

AUTHORS: Alekseyev, F.A., Yerozolimskiy, B.G., Besspalov, D.F.,  
Bondarenko, L.N., Boytsik, L.P., Popov, N.V.,  
Khaustov, A.I., Romanovskiy, V.P., Shimelevich, Yu.S.  
Shkol'nikov, A.S., and Yudin, L.I.

TITLE: The result of applying neutron impulse methods and  
apparatus for investigating borehole logs

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, 34,  
abstract 11A304 (V sb. Yadern. geofiz. pri poiskakh  
polezn. iskopayemykh, M., Gostoptekhzdat, 1960, 3-20)

TEXT: A borehole impulse generator of neutrons is described toge-  
ther with the method of impulse-neutron neutron-logging (INNL). A  
description is given for the electronic layout of the borehole ge-  
nerator of neutrons and the surface apparatus for impulse neutron  
logging. During laboratory tests of the generator a stable mean neu-  
tron yield of  $\sim 2 \times 10^7$  neutr./sec. was obtained at 100 kv. of acce-  
lerating voltage in the tube. The impulse duration amounted to 100

Card 1/2

The result of a typical neutron ...

11/11/65  
11/11/65

nsec, the transmission frequency being 400 c/s. The neutron generator was used in the commercial testing of INEL. INEL readings against oil-bearing beds exceed by 10 times those for aquiferous beds containing mineralized water, at a delay time of 1000 nsec. Certain impediments and limitations of thermal impulse neutron-logging in different oil- and water-saturated beds are indicated, and the requirements for the apparatus are stated. Further prospects are indicated for the application of impulse neutron generators. [Abstractor's note: Complete translation].

Card 2/2

05464

S/089/60/009/002/019/019/XX  
B006/B059

21.7100

AUTHORS: Yerozolimskiy, B. G., Shkol'nikov, A. S., Isakov, A. I.

TITLE: Use of a Pulsed Neutron Source for Investigations in  
Petroleum Boreholes

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 2, pp. 144 - 145

TEXT: The present "Letter to the Editor" contains details on theory and results of model experiments with miniature accelerating tubes serving as pulsed neutron sources for radioactive core sampling of boreholes. The simplest method of rock sampling is based upon measurement of the time dependence of thermal neutron density in the rock, i.e., determination of neutron lifetime in the rock. This method is suitable for determining mineral oil or water in a seam. If, for example, a sandy layer contains 20% water with 200g/l of dissolved salts, then the thermal neutron lifetime  $\tau$  in such a medium is 250  $\mu$ sec, and 570  $\mu$ sec if this sandy layer contains 20% of mineral oil. This fact is used to determine the position of an oil-water boundary layer by means of constant neutron sources. In the case of such neutron sources, the measured neutron distribution around

Card 1/4



85464

Use of a Pulsed Neutron Source for  
Investigations in Petroleum Boreholes

S/089/60/009/002/019/019/XX  
B006/B059

the source is proportional to the lifetime in the medium, whereas in the case of pulsed sources, the measured function  $n(t)$  is related to  $\tau$  by a factor  $e^{t/\tau}$ , i.e., the relationship between measured quantity and  $\tau$  is much more distinct than in the case of measurements in a steady field. Measurements with a pulsed neutron source were made on rock-bed models using the methods described in Refs. 1 and 8. Fig. 1 shows the curves of measurements (neutron density versus time) made in borehole models of concrete, sand, paraffin, and salts. A  $\text{BF}_3$  filled proportional counter served as a thermal neutron indicator. The pulses from the counter were fed into a 100-channel time analyzer. A deuteron acceleration tube with a tritium target was used as a neutron source (14 Mev), giving 5- $\mu\text{sec}$  neutron pulses at a frequency of 300 cps. Fig. 2 shows the model with source and counter. The results of the investigation showed that between the "petroleum" and the "water" containing model (sand+paraffin and sand+paraffin+salts, respectively) the recording of the indicator at  $t = 800 \mu\text{sec}$  differed by the ten-fold. In contrast to this, the usual methods of neutron core sampling show a difference of only 40 to 50%. The difference is in agreement with theoretical estimates. The results

Card 2/4

85464

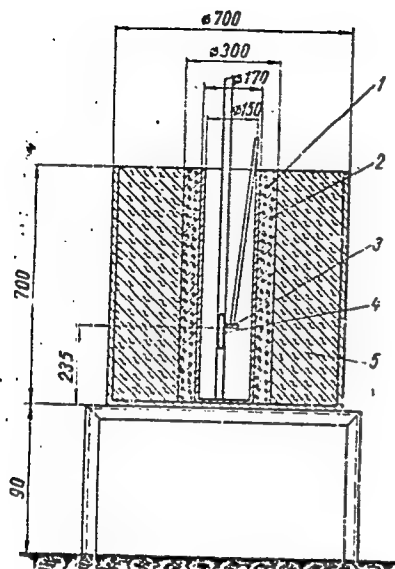
Use of a Pulsed Neutron Source for  
Investigations in Petroleum Boreholes

S/089/60/009/002/019/019/XX  
B006/B059

show that this new method is very convenient in determining the water -  
petroleum boundary. The authors thank G. N. Flerov for discussions and  
stimulations, as well as I. M. Frank and F. L. Shapiro for assistance.  
There are 2 figures and 8 references: 5 Soviet and 3 US.

SUBMITTED: July 15, 1959

Card 3/4



85464

S/089/60/009/002/019/019/XX  
B006/3059

Legend to Fig. 2: 1 - drive pipe, 2 - cement ring, 3 - target, 4 - counter,  
5 - sand+paraffin (and salt) mixture.

Card 4/4

SHKOL'NIKOV, A.S.

Using neutron-neutron pulse logging for determining the water-oil  
contact in cased wells. Neft.khoz. 38 no.8:13-19 Ag '60.

(MIRA 13:8)

(Oil well logging, Radiation)

SHKOL'NIKOV, A. S.

Cand Tech Sci - (diss) "Development of the bases of impulse neutron-neutron logging, and methods of its application for differentiation of rocks as to petroleum-water saturation." Novosibirsk, 1961. 19 pp; (Academy of Sciences USSR, Siberian Division, Joint Academic Council for Phys-Math and Tech Sci); 220 copies; price not given; (KL, 10-61 sup, 220)

SHKOLNIKOV, A.S.

107

PHASE I BOOK EXPLOITATION SOV/5592

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniye v narodnom khozyaystve SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy Vsesoyuznogo soveshchaniya 12 - 16 aprelya 1960 g. g. Riga, v 4 tomakh. t. 4: Poiski, razvedka i razrabotka poleznykh iskopayemykh (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR; Transactions on the Symposium Held in Riga, April 12 - 16, 1960, in 4 volumes. v. 4: Prospecting, Surveying, and Mining of Mineral Deposits) Moscow, Gostoptekhizdat, 1961. 284 p. 3,640 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskyy komitet Soveta Ministrov SSSR, Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii

Eds. (Title page): N. A. Petrov, L. I. Petrenko, and P. S. Savitskiy; ed. of this volume: M. A. Speranskiy; Scientific ed.: M. A. Speranskiy; Executive Eds.: N. N. Kuz'mina and A. G. Ionel';

Card 1/11

Radioactive Isotopes and Nuclear (Cont.)

102  
SOV/5592

Tech. Ed.: A. S. Polosina.

PURPOSE : The book is intended for engineers and technicians dealing with the problems involved in the application of radioactive isotopes and nuclear radiation.

COVERAGE: This collection of 39 articles is Vol. 4 of the Transactions of the All-Union Conference of the Introduction of Radioactive Isotopes and Nuclear Reactions in the National Economy of the USSR. The Conference was called by the Gosudarstvennyy nauchno-tekhnicheskii komitet Sovet Ministrov SSSR (State Scientific-Technical Committee of the Council of Ministers of the USSR), Academy of Sciences USSR, Gosplan SSSR (State Planning Committee of the Council of Ministers of the USSR), Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers of the USSR for Automation and Machine Building), and the Council of Ministers of the Latvian SSR. The reports summarized in this publication deal with the advantages, prospects, and

Card 2/11

Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

development of radioactive methods used in prospecting, surveying, and mining of ores. Individual reports present the results of the latest scientific research on the development and improvement of the theory, methodology, and technology of radiometric investigations. Application of radioactive methods in the field of engineering geology, hydrology, and the control of ore enrichment processes is analyzed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

|   |    |
|---|----|
| Alekseyev, F. A. Present State and Future Prospects of Applying the Methods of Nuclear Geophysics in Prospecting, Surveying, and Mining of Minerals | 5  |
| Eulashevich, Yu. P., G. M. Voskoboynikov, and L. V. Mazyukin. Neutron and Gamma-Ray Logging at Ore and Coal Deposits                                | 19 |
| Gordeyev, Yu. I., A. A. Mukher, and D. M. Srebrdol'skiy. The  |    |
| Card 3/11   |    |



|   |          |    |
|---|----------|----|
| Radioactive Isotopes and Nuclear (Cont.)  | SOV/5592 | 16 |
| Present State of Radiometric Methods and Their Efficiency in Studying Geological Sections of Petroleum, Gas, Ore, and Coal Boreholes  |          | 30 |
| Speranskiy, M. A. Application of Radioactive Methods in the Exploration and Prospecting of Coal Deposits  |          | 34 |
| Zaporozhets, V. M., and B. I. Rogov. Radiometric Equipment for the Investigation of Boreholes   |          | 40 |
| Mikhayev, G. P., and N. G. Feytel'man. Economic Effect of the Application of Radiometric Methods in Prospecting, Surveying, and Exploitation of Oil and Gas Deposits  |          | 47 |
| Alekseyev, F. A., D. F. Baspalov, B. M. Burov, B. G. Yarevolim-skiy, N. V. Popov, Yu. S. Shimelevich, and A. S. Shkol'nikov. Pulse-Type Neutron Method for Investigating the Geological Sections of Boreholes |          | 55 |

Card 4/11

ALIMOV, Fedor A., FOMIN, D. F., SUDOVNIKOV, Yu. B.  
GHEOLINOV, A. S. and GHEOLINOV, D. H.

(4)

"The Neutron-neutron Pulse Well-logging."

report to be submitted for the Conference on Nuclear Geophysics,  
Krakow, Poland, 24-30 Sept 1962.

SHKOL'NIKOV, B.

~~Courses~~ of development of cooperative societies of the Chuvash  
S.S.R. Prom. koop. 12 no.10:6-7 0 '58. (MIRA 11:10)

1. Zamestitel' nachal'nika planovo-ekonomicheskogo upravleniya  
Rospromsoвета.

(Chuvashia--Cooperative societies)

ZAVALI, Pavlo Volodimirovich; IGOSHKIN, Georgiy Stepanovich  
[Ihoshkin, H.S.]; SHENDRIK, Lyudmila Karpo na  
[Shendryk, L.K.], red.; SHKOL'NIKOV, B., red.; SHUSTER, A.,  
red.

[Get acquainted with the Ukraine] Poznaiomtes' z Ukrainoi".  
Kyiv, Mystetstvo, 1964. 1 v. (MIRA 18:10)

SHKOL'NIKOV B. [M.]

Shkol'nikov B., "Use of Automatic Regulators in Drilling for Oil and Gas," Byulletin tekhniko-ekonomicheskoy informatsii / Technical and Economic Information Bulletin 7, 1953, No 5, Pages 9-10, 1 figure.

SHKOL NIKOV, B.M.

16400\* (Automatic Drill Regulator, Type BAR-150.) Buro-  
voit avtomaticheskii reguliator tipa BAR-150. B. M. Shkol-  
nikov and L. I. Sud. *Energeticheskii Biulleten*, 1954, no. 7,  
July, p. 1-9.

Design and performance of instrument governing maintenance  
of given load on drill bit. Diagrams, graphs.

62

①

SHKOL'NIKOV, B.M.

AID P - 1661

Subject : USSR/Electricity - Engineering

Card 1/2 Pub. 28 - 1/9

Authors : Sulkanishvili, I. N. and Shkol'nikov, B. M.

Title : On the article "On efficiency of electric drive used for drilling oil wells" (Published in Energ. byul., No.1, 1955)

Periodical : Energ. byul., 2, 1-4, F 1955

Abstract : The authors discuss and minutely analyze the original article on improvement of drilling oil well machinery, and make the following suggestions: 1) several electric drive models should be designed and built for shallow, deep, and very deep wells instead of the present two; 2) the hoists and rotary tables should be operated by a high-voltage electric drive; 3) an independent drive should be added for auxiliary operation in lowering and hoisting tools; 4) the hoist and rotary

Energ. byul., 2, 1-4, F 1955

AID P - 1661

Card 2/2 Pub. 28 - 1/19

table drive mechanisms should have electromagnetic couplings; 5) there should be individual electric control equipment at a drilling site; 6) the AC drives should be used for diesel drilling outfits 7) the mud pumps should have a variable-speed drive.

Institution: None

Submitted : No date



SHKOL'NIKOV, B.M.

AID P - 1891

Subject : USSR/Electricity-Engineering

Card 1/1 Pub. 28 - 3/7

Authors : Sul Khanishvili, I. N. and Shkol'nikov, B. M.

Title : Controlled electric drive for mud pumps in turbine drilling

Periodical : Energ. byul., no.4, 15-20, Ap 1955

Abstract : The authors discuss the problem of obtaining higher efficiency from an electric drive and mud pump used in turbine oil drilling. Three practical suggestions to improve turbine drilling are made. Six diagrams.

Institution: None

Submitted : No date

AID P - 3040

Subject : USSR/Electricity  
Card 1/1 Pub. 27 - 27/33  
Authors : Shkol'nikov, B. M., Eng. and I. I. Sud  
Title : ~~Automatic drilling regulator~~ Automatic drilling regulator (Review of technical periodicals)  
Periodical : Elektrichestvo, 7, 146-147, J1 1955  
Abstract : The authors summarize data from two Soviet periodicals, and give a description of the regulator with one diagram, 2 Soviet references (1954).  
Institution : None  
Submitted : No date

SULKHANISHVILI, I.N.; SHKOL'NIKOV, B.M.

Drilling rig drive with electromagnetic clutches. Energ.bui.  
no.2:11-17 F '56. (MLRA 9:5)  
(Oil well drilling--Equipment and supplies)

SUD, I.I.; SHKOL'NIKOV, B.M.

New system for controlling the feed of the bit in electric drilling.  
Energ.biul.no.3:17-23 '56. (MIRA 9:7)  
(Oil well drilling--Equipment and supplies) (Electric controllers)

SHKOL'NIKOV, B.M.; SUD, I.I.

Improved characteristics of bottom electric motors driving the  
bit. Energ.bkul.no.7:20-24 JI '56. (MIRA 9:10)  
(Electric motors) (Oil well drilling--Equipment and supplies)

...nikov, ... of ... (the ... "the ... of ...  
... ~~the~~ <sup>the</sup> chief ... <sup>by</sup> ... of ...  
... (the ... Higher Education USSR. ... of ...  
... (the ... of ...), 150 copies  
(11, ...)

AUTHORS: Shkol'nikov, B. M., Engineer, Sud, I. I. 105-58-6-18/33  
Engineer

TITLE: Some Properties and the Computation of a Multi-Motor Drive System With a Mechanical Differential (Nekotoryye svoystva i raschet sistemy mnogodvigatel'nogo privoda s mekhanicheskimi differentsialom)

PERIODICAL: Elektrichestvo, 1958, Nr 6, pp. 69-74 (USSR)

ABSTRACT: Here the way of computing and selecting the gear ratios of the electric engines of the electric drive are given according to the diagram of connections as shown here, and on the basis of the experience made in the operation, in comparison to other known diagrams of connections. In the diagram of connections shown here one asynchronous motor K with shunted rotor and one d.c. dynamo D drive two driving shafts of the gear. Simultaneously the motor K drives another d.c. dynamo G. The dynamo D and G are coupled according to the diagram of connections generator-motor. Their excitation is independent. The engine K is fed by the alternative-current net. Analogous diagrams of connections are used by the firm "Speed Control" (USA) First the selection of the gear ratio is treated. It is shown that with given load moment  $M_w$  at the initial shaft of the gear the value of the load moment at the shaft of the dynamo D,

Card 1/3

Some Properties and the Computation of a Multi-Motor Drive System With a Mechanical Differential . 105-58-6-18/33

$M_D$ , can be determined with a certain exactness according to the angular factor of this straight line.  $M_D$  determines the weight, the dimensions and the costs of the dynamo D. Analogously the section separated from the  $n_g$  axis (velocity of the initial shaft of the gear) by this line characterizes the output of the engine K. In the investigation of the reduction factor for the moments of inertia and resistance it is shown that the moments of inertia that are reduced to the differential bridge are reduced to the driving gear wheels by division with the constant factor  $k_{drive}^2 = 4$ . The moments of resistance are reduced by means of the same factor  $k_{drive} = 2$ . For the selection of the engine the functional diagram of connection of the drive is used. The formulae necessary for the computation of the moments of the engine are given in tabular form. For the characteristic mechanical properties of the drive in general form the equation (15) is given. The velocity of the driven shaft of the gear is controlled by variations of the excitation in the dynamos G and D. For the efficiency of the gear the equation (16) is given. The advantages of the system as described

Card 2/3



Some Properties and the Computation of a Multi-Motor Drive System With a Mechanical Differential 105-58-6-18/33

here are: 1) The possibility of obtaining any small rotational speed at the control shaft without increasing the velocity at the driving shaft up to values undesired because of the cooling of the motor. 2) The possibility of reversing the control shaft without reversing the direction of rotation in the electric engines. 3) The possibility of obtaining a wide range for the variation of the speed at the control shaft at a comparatively small range of speed regulation in the electric engines. - Among the disadvantages of such drives are the low efficiency in the operation with characteristic control curves and the comparatively complicated gear construction. There are 3 figures, 2 tables, and 5 references, 4 of which are Soviet.

ASSOCIATION: Giproneftemash Gosplana RSFSR(Giproneftemash Gosplana RSFSR)

SUBMITTED: December 27, 1957

1. Electric motors---Performance
2. Mechanical drives---Design
3. Mechanical drives---Control
4. Mathematics

Card 3/3

AUTHORS: Shkol'nikov, B. M., Engineer, 30W105-58-7-31/32  
Sud, I. I., Engineer

TITLE: K. N. Kulizade. "Electric Equipment for Oil Drilling"  
 (K. N. Kulizade. Elektrooborudovaniye dlya bureniya  
 neftyanykh skvazhin)

PERIODICAL: Elektrichestvo, 1958, Nr 7, pp. 94 - 94 (USSR)

ABSTRACT: This is a review. Second revised and enlarged edition. 621  
 pages, price 22.75 Roubles. "Aznefteizdat" publishing house,  
 1957. The book is intended for students of the department  
 of oil fields at the petroleum institutes. Chapter  
 I - VII: Short history of the development of Soviet electrical  
 equipment in the boring aggregates. General data on electric  
 power. Chapter VIII - XXII: data on the electric equipment  
 of the boring plants, i. e.: chapter VIII: fundamental  
 requirements for electric drives, as well as on the separate  
 drives (table, winch, pumps). Chapter IX: load diagrams of  
 the boring- and hoisting motors. Chapter X, XI, and XII  
 gives a good survey of the calculation formulae for the  
 determination of the power of the electromotor. Chapter XIII:  
 properties and characteristics of Diesel-electric drives of

Card 1/2

K. N. Kulizade. "Electric Equipment for Oil Drilling" 105-58-7-31/32

boring plants and circuits which were worked out in the course of the last years by the Giproneftemash, Uralmashzavod and the TsKB "Elektroprivod". Chapter XIV: demands on the plants for automatic thrust of the cutting head. Chapter XV: electric drill. Chapter XVI - XVIII: description of the control circuit. Chapter XIX: safety devices. Chapter XX - XXI: of the Electric supply circuits and illumination circuits. Chapter XXII: an ingenious method for the standardization of the electric energy consumption according to the bore hole advance. Enclosure : table of breakdowns and measures for their elimination.

ASSOCIATION: Giproneftemash (Giproneftemash)

1. Drilling machines--Applications
  2. Electrical equipment
- USSR

Card 2/2

ZHEVAGO, Konstantin Aleksandrovich; PORTNOY, Teodor Zinov'yevich;  
SEKOL'NIKOV, Bernard Markovich. Prinimal uchastiye SUD, I.I..  
MARTYNOVA, M.P., vedushchiy red.; POLOSINA, A.S., tekhn.red.

[Boring equipment drives] Privod burovykh ustanovok. Moskva,  
Gos.nauchno-tekhn.izd-vo نفت. i gorno-toplivnoi lit-ry, 1960.  
362 p. (MIRA 13:6)

(Boring machinery)